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Workers' Memorial Day — April 28, 1998

April 28, 1998, has been designated Workers' Memorial Day to recognize persons who have died from occupational injuries or diseases and opportunities to prevent these deaths. During 1980–1994, a total of 88,622 workers in the United States died from work-related injuries; in 1992, costs of such injuries were an estimated $145 billion (*1*). An estimated additional 60,000 workers died from occupational diseases.

Additional information about causes and prevention of work-related injury and disease is available from CDC's National Institute for Occupational Safety and Health (NIOSH), telephone (800) 356-4674; or on the World-Wide Web http://www.cdc.gov/niosh/homepage.html.

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Fatal Occupational Injuries — United States, 1980–1994

CDC's National Institute for Occupational Safety and Health (NIOSH) monitors occupational injury deaths through death certificates compiled for the National Traumatic Occupational Fatalities (NTOF) surveillance system* (*1*). Previous reports analyzed data from 1980–1989 (*1–3*). This report updates these estimates on the magnitude of work-related injury deaths for the United States from 1980 through 1994, the most recent year for which data are available from this system, and identifies high-risk industries and occupations at national and state-specific levels. The findings indicate that the annual total number of deaths and crude death rates decreased from 7405 (7.5 per 100,000 workers) in 1980 to 5406 (4.4 per 100,000 workers) in 1994.

National death rates were calculated using denominators from employment data from the Current Population Survey, a population-based household survey of the Bu-

*NTOF is based on death certificates compiled from 52 vital statistics reporting units in the United States. Inclusion criteria for death certificate submission to the NTOF database include 1) age ≥16 years; 2) external cause of death (*International Classification of Diseases, Ninth Revision*, codes E800–E999); and 3) "injury at work" designation.

Fatal Occupational Injuries — Continued

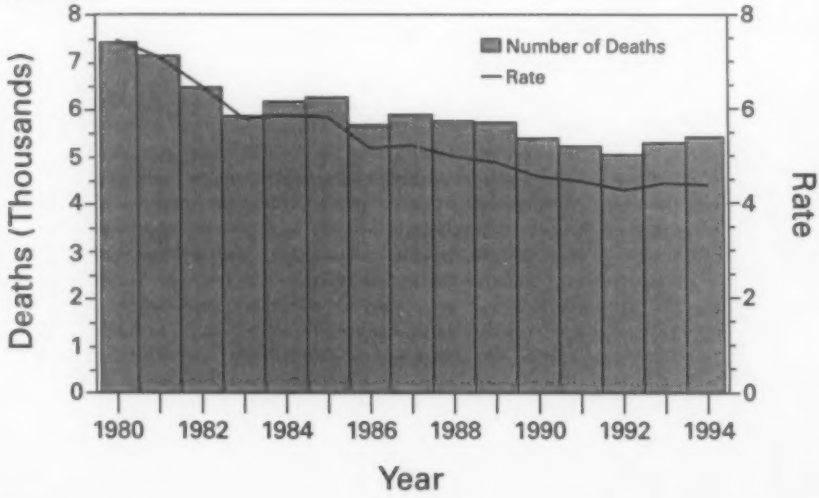
reau of Labor Statistics (BLS) (*4*). Deaths among military workers were excluded from the analyses because the employment data do not include military employment numbers. Crude death rates per 100,000 workers were calculated as the number of deaths among civilian workers for each year divided by the number of employed civilians for each year. Because published estimates for employment by state exclude self-employed workers and report government workers separately, computerized data files obtained from the 1990–1994 BLS Current Population Survey monthly employment files (*5*), which include self-employed and government workers by industry categories, were used to calculate death rates by state.

National Estimates, 1980–1994

From 1980 through 1994, a total of 88,622 civilian workers died in the United States from occupational injuries, an average of 16 work-related deaths per day. The annual total number of deaths declined 27%, from 7405 in 1980 to 5406 in 1994 (Figure 1). The average rate for occupational injury deaths for all workers decreased 41%, from 7.5 per 100,000 workers in 1980 to 4.4 per 100,000 workers in 1994 (Figure 1). Motor-vehicle–related deaths,[†] the leading cause of death for U.S. workers since 1980 (Figure 2), accounted for 23.1% of deaths during the 15-year period. Homicides became the second leading cause of occupational injury deaths in 1990 (13.5% of occupation-related deaths), surpassing machine-related deaths (13.3% of total).

[†]The category of motor-vehicle–related deaths includes crashes occurring on and off the roadway, pedestrians struck by motor vehicles, noncollision incidents (e.g., falls from buses or cars), incidents involving off-road motor vehicles (e.g., snowmobiles or all-terrain vehicles), and incidents involving other road vehicles (e.g., bicycles).

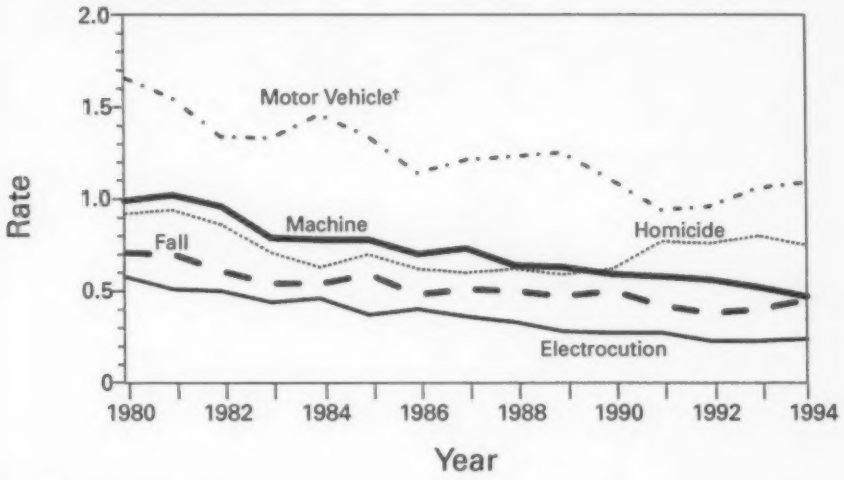
FIGURE 1. Number and rate* of occupational injury deaths, by year — United States, 1980–1994



*Per 100,000 workers.

Fatal Occupational Injuries — Continued

FIGURE 2. Rates* for leading causes of occupational injury deaths, by cause and year — United States, 1980–1994



*Per 100,000 workers.

†The category of motor-vehicle–related deaths includes crashes occurring on and off the roadway, pedestrians struck by motor vehicles, noncollision incidents (e.g., falls from buses or cars), incidents involving off-road motor vehicles (e.g., snowmobiles or all-terrain vehicles), and incidents involving other road vehicles (e.g., bicycles).

The industries in which the largest numbers of deaths occurred during this period were construction (16,091 deaths [18.2%]), transportation/communication/public utilities (15,668 [17.7%]), and manufacturing (12,371 [14.0%]). Industries with the highest death rates per 100,000 workers were mining (30.5), agriculture/ forestry/fishing (20.5), and construction (15.5). The occupation categories in which the largest numbers of deaths occurred were precision production/crafts/repairers (17,392 [19.6%]), transportation/material movers (16,134 [18.2%]), and farmers/foresters/ fishers (10,960 [12.4%]). Occupation categories with the highest death rates per 100,000 workers were transportation/material movers (23.0), farmers/foresters/fishers (20.7), and handlers/equipment cleaners/helpers/laborers (15.1).

State Estimates, 1990–1994

From 1990 through 1994, motor-vehicle–related incidents were the leading cause of occupational death in 38 states (Table 1). Machine-related incidents were the leading cause of death in five states; homicides, in three states and the District of Columbia; falls, in two states; and water transport and struck by falling objects, one state each. The construction industry accounted for the largest number of work-related deaths in 19 states; manufacturing, in 12 states; agriculture/forestry/fishing, in 11 states; transportation/communication/public utilities, in five states; retail trade, in one state and the District of Columbia; services, in one state; and mining, in one state.

Fatal Occupational Injuries — Continued

TABLE 1. Leading causes of occupational injury deaths and major industry and occupation categories with highest numbers and rates of death, by state — United States, 1990–1994

State	Leading cause	Industry		Occupation	
		Highest no.	Highest rate	Highest no.	Highest rate
Alabama	Motor vehicle*	Manufacturing	Mining	Crafts†	Transport§
Alaska	Water transport	Ag/For/Fish¶	Ag/For/Fish	Farm/For/Fish**	Farm/For/Fish
Arizona	Struck by falling	Construction	Mining	Crafts	Transport
Arkansas	Motor vehicle	Manufacturing	Ag/For/Fish	Transport	Transport
California	Homicide	Service	Mining	Crafts	Transport
Colorado	Motor vehicle	TCPU††	Ag/For/Fish	Crafts	Farm/For/Fish
Connecticut	Motor vehicle	Manufacturing	Ag/For/Fish	Crafts	Transport
Delaware	Motor vehicle	Manufacturing	Ag/For/Fish	Crafts	Farm/For/Fish
District of Columbia	Homicide	Retail trade	Construction	Services	Laborers
Florida	Motor vehicle	Construction	Ag/For/Fish	Crafts	Transport
Georgia	Motor vehicle	Construction	Ag/For/Fish	Crafts	Transport
Hawaii	Motor vehicle	Construction	Ag/For/Fish	Crafts	Transport
Idaho	Motor vehicle	Ag/For/Fish	Ag/For/Fish	Farm/For/Fish	Transport
Illinois	Motor vehicle	Construction	Ag/For/Fish	Crafts	Farm/For/Fish
Indiana	Motor vehicle	TCPU	Ag/For/Fish	Transport	Farm/For/Fish
Iowa	Machine	Ag/For/Fish	Ag/For/Fish	Farm/For/Fish	Farm/For/Fish
Kansas	Motor vehicle	Ag/For/Fish	Mining	Farm/For/Fish	Transport
Kentucky	Motor vehicle	Ag/For/Fish	Mining	Crafts	Farm/For/Fish
Louisiana	Motor vehicle	TCPU	Mining	Crafts	Transport
Maine	Motor vehicle	Manufacturing	Ag/For/Fish	Farm/For/Fish	Farm/For/Fish
Maryland	Motor vehicle	TCPU	Mining	Crafts	Farm/For/Fish
Massachusetts	Falls	Construction	Ag/For/Fish	Crafts	Farm/For/Fish
Michigan	Homicide	Manufacturing	Ag/For/Fish	Crafts	Farm/For/Fish
Minnesota	Motor vehicle	Ag/For/Fish	Mining	Farm/For/Fish	Farm/For/Fish
Mississippi	Motor vehicle	Manufacturing	TCPU	Transport	Farm/For/Fish
Missouri	Motor vehicle	Ag/For/Fish	Mining	Transport	Farm/For/Fish
Montana	Machine	TCPU	Mining	Farm/For/Fish	Transport
Nebraska	Motor vehicle	Ag/For/Fish	Mining	Farm/For/Fish	Farm/For/Fish
Nevada	Motor vehicle	Construction	Mining	Crafts	Transport
New Hampshire	Motor vehicle	Construction	Construction	Crafts	Farm/For/Fish
New Jersey	Motor vehicle	Construction	Ag/For/Fish	Crafts	Farm/For/Fish
New Mexico	Motor vehicle	Construction	Mining	Transport	Transport
New York	Homicide	Retail trade	Mining	Transport	Laborers
North Carolina	Motor vehicle	Manufacturing	Ag/For/Fish	Crafts	Farm/For/Fish
North Dakota	Machine	Ag/For/Fish	Mining	Farm/For/Fish	Transport
Ohio	Motor vehicle	Manufacturing	Mining	Crafts	Farm/For/Fish
Oklahoma	Motor vehicle	Construction	Mining	Crafts	Transport
Oregon	Motor vehicle	Manufacturing	Mining	Farm/For/Fish	Farm/For/Fish
Pennsylvania	Motor vehicle	Construction	Mining	Transport	Transport
Rhode Island	Falls	Construction	Ag/For/Fish	Crafts	Farm/For/Fish
South Carolina	Motor vehicle	Construction	Construction	Crafts	Farm/For/Fish
South Dakota	Motor vehicle	Ag/For/Fish	Ag/For/Fish	Farm/For/Fish	Farm/For/Fish
Tennessee	Machine	Construction	Mining	Crafts	Farm/For/Fish
Texas	Motor vehicle	Construction	Mining	Crafts	Transport
Utah	Motor vehicle	Construction	Mining	Crafts	Transport
Vermont	Motor vehicle	Manufacturing	TCPU	Transport	Transport
Virginia	Motor vehicle	Construction	Mining	Crafts	Farm/For/Fish
Washington	Motor vehicle	Manufacturing	Mining	Farm/For/Fish	Farm/For/Fish
West Virginia	Motor vehicle	Mining	Mining	Crafts	Farm/For/Fish
Wisconsin	Machine	Ag/For/Fish	Mining	Farm/For/Fish	Farm/For/Fish
Wyoming	Motor vehicle	Construction	Construction	Crafts	Tech/Support§§

*The category of motor-vehicle–related deaths includes crashes occurring on and off the roadway, pedestrians struck by motor vehicles, noncollision incidents (e.g., falls from buses or cars), incidents involving off-road motor vehicles (e.g., snowmobiles or all-terrain vehicles), and incidents involving other road vehicles (e.g., bicycles).

†Precision production/Crafts/Repairers.

§Transportation/Material movers.

¶Agriculture/Forestry/Fishing.

**Farmers/Foresters/Fishers.

††Transportation/Communication/Public utilities.

§§Technicians and related technical support occupations.

Fatal Occupational Injuries — Continued

Mining was the highest risk industry in 26 states; agriculture/forestry/fishing, in 19 states; construction, in three states and the District of Columbia; and transportation/communication/public utilities, in two states.

The largest numbers of deaths, by occupation, were among precision production/crafts/repairers in 29 states; farmers/foresters/fishers in 14 states; transportation/material movers in eight states; and service workers in the District of Columbia. Occupation categories with the highest rates were farmers/foresters/fishers in 28 states; transportation/material movers in 20 states; handlers/equipment cleaners/helpers/laborers in one state and the District of Columbia; and technicians and related technical support occupations in one state.

Reported by: Div of Safety Research, National Institute for Occupational Safety and Health, CDC.

Editorial Note: The findings in this report indicate a general decrease in occupational injury deaths in the United States during 1980–1994. The decreases include the total numbers and average crude rates of deaths over the years and the average number of work-related deaths per year from the 1980s (6359) through 1994 (5267). In addition, the leading causes of death have changed through the 1990s. Although surveillance data cannot identify the reasons for these changes over time, there have been many changes in the workplace that may have contributed to these changes (e.g., increased regulations and hazard awareness and new technology and mechanization) as well as changes in the economy, the industrial mix, and the distribution of the workforce (*3*).

The findings of this analysis are subject to at least two limitations. First, only 67%–90% of all fatal occupational injuries can be identified through death certificates (*1*). Second, classification of "on-the-job" differs among medical examiners and coroners (*6*). Because of these limitations, the numbers presented in this report should be considered as minimum values.

The NTOF surveillance system, the most comprehensive source of surveillance data for fatal work-related injuries during 1980–1991, allows examination of trends over time and analysis of data within states, useful tools for identifying injury patterns and suggesting targets for preventive interventions. To address the limitations of death certificates and other existing data sources in the surveillance of fatal occupational injuries, in 1992 the BLS began collecting national work-related death data through the Census of Fatal Occupational Injuries (CFOI). CFOI is a multi-source surveillance system that typically requires at least two source documents[§] to verify work-relatedness (*7–10*). Although CFOI and NTOF identified similar patterns for industry and occupation in 1994, NTOF captured 5406 civilian deaths and CFOI captured 6528 (*10*). Another difference between the two surveillance systems is that the coding systems used to specify cause of death differ: NTOF uses E-codes from the *International Classification of Diseases, Ninth Revision* (*1*); CFOI uses the BLS-designed Occupational Injury and Illness Classification System (*7–10*). Direct comparisons of the two systems are complicated, but broad results on cause of death appear to be similar.

The data presented in this report provide the basis for strategies to prevent traumatic work-related injury deaths by taking into account high-risk industries and occupations and the varying patterns of fatal injuries identified in these data. In particular, state health departments and others involved in prevention of occupational injuries can use the state-specific data to identify high-priority areas for intervention. Addi-

[§]CFOI source documents include death certificates, Workers' Compensation records, and reports to federal and state agencies.

Fatal Occupational Injuries — Continued

tional state-specific data and information about NTOF are available from NIOSH; telephone (800) 356-4674 or (513) 533-8328.

References

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Surveillance for Nonfatal Occupational Injuries Treated in Hospital Emergency Departments — United States, 1996

CDC's National Institute for Occupational Safety and Health (NIOSH) uses the National Electronic Injury Surveillance System (NEISS) for surveillance of nonfatal occupational injuries treated in hospital emergency departments (EDs).* This report, based on 1996 NEISS data, is the first since 1983 (*1*) to provide updated national estimates of the magnitude and risk for nonfatal occupational injuries treated in EDs; the findings indicate that the workers at highest risk are young and male.

The Consumer Product Safety Commission (CPSC) developed NEISS to monitor injuries involving consumer products and to serve as a source for follow-up investigation of selected product-related injuries (*2*). Data are collected at 91 hospitals selected from a stratified probability sample of all hospitals in the United States and its territories. The sampling frame was stratified by hospital size (determined by the annual total of ED visits) and geographic region, and the final sample of 91 hospitals was then selected. NIOSH used 65 of the 91 hospitals to collect work-related injury data.† Each injury case in the sample was assigned a statistical weight based on the inverse of the hospital's probability of selection, and this weight was used to calculate national esti-

*The National Electronic Injury Surveillance System (NEISS), which is maintained by the Consumer Product Safety Commission (CPSC), was first modified to collect data about work-related injuries in 1981 and was used for surveillance of work-related injuries treated in EDs until this use was discontinued in 1986. Since 1992, the NEISS program has been gradually reinstated. Beginning in October 1995, data were collected for all workers, regardless of age or industry, in 65 of the 91 hospitals that CPSC includes in the NEISS surveillance program.

†Collection of work-related data was limited to the 65 hospital subsample because of budgetary constraints.

Nonfatal Occupational Injuries — Continued

mates. Confidence intervals (CIs) were calculated using methods described in detail elsewhere (*3*).

A work-related case was defined as any injury sustained during performance of 1) work for compensation, 2) volunteer work for an organized group, or 3) a work task on a farm. The "Operational Guidelines for Determination of Injury at Work" were provided to hospital coders to assist in identifying work-related injuries (*4*). Unlike the CPSC consumer product data, the work-related data collected for NIOSH included all cases regardless of whether a consumer product was involved in the injury event.

Estimates of numbers of employed workers, used to calculate injury rates, were derived from the Current Population Survey (CPS) of the Bureau of Labor Statistics (BLS) (*5*), a national population-based household survey that includes approximately 60,000 households each month. For this report, injury rates or risk estimates were calculated using two different estimates of employment as denominators. The first method was based on numbers of workers, which were extracted directly from published BLS data; injury rates using these denominators are referred to as "employee-based" and are presented as numbers of injuries per 100 workers. The second approach was based on actual numbers of hours worked, and the corresponding rates are referred to as "hour-based." CPS monthly public use micro data files were used to generate the hour-based employment estimates, which were calculated by dividing the actual hours worked per week (as reported by the household respondent) by 40 hours, then multiplying by the weighted estimate of the number of working persons; these rates are presented as numbers of injuries per 100 full-time equivalents (FTEs). All injury rates presented in this report are crude rates. Ninety-five percent CIs and injury rate ratios were calculated from the hour-based rates. Injured persons aged ≤15 years were excluded from this analysis because employment data used to calculate rates were unavailable for this age group.

An estimated 3.3 million persons aged ≥16 years were treated for occupational injuries in EDs in the United States during 1996, yielding an average crude annual rate of 2.8 injuries per 100 FTEs (95% CI=2.2–3.3). Of those persons injured, 23.2% (765,762) were workers aged 16–24 years, 70.8% (2,337,412) were aged 25–54 years, and 6.0% (198,477) were aged ≥55 years. The rates were 3.3 per 100 FTEs for men (69% of total injuries) and 2.1 per 100 FTEs for women (31% of total injuries) (Table 1). Hour-based injury rates were higher than employee-based rates for women and for the youngest and oldest workers. The overall male:female rate ratio (based on the FTE employment estimates) was 1.6:1, but this ratio decreased with increasing age. The ratio was 1.5:1 for workers aged 16–17 years and 2.0 for workers aged 18–19 and 20–24 years, decreasing to 0.9:1 for workers aged 65–74 years and 0.7:1 for workers aged ≥75 years.

Persons aged 18–19 years had the highest injury rates for both men and women (Table 1). Excluding workers aged 16–17 years, injury rates decreased with increasing age. Men aged <25 years had a significantly higher injury rate (6.7 per 100 FTEs; 95% CI=4.8–8.6) than all men (3.3 per 100 FTEs; 95% CI=2.6–4.0) and men aged ≥45 years had a significantly lower rate (1.7 per 100 FTEs; 95% CI=1.4–2.1). Women aged <20 years had a significantly higher rate (4.2 per 100 FTEs; 95% CI=3.1–5.3) than all women (2.1 per 100 FTEs; 95% CI=1.7–2.5), and those aged 65–74 years had a significantly lower rate (1.2 per 100 FTEs; 95% CI=0.8–1.7).

Hands and fingers were the anatomic sites sustaining the most injuries (30%) (Table 2). Physician-diagnosed sprains and strains accounted for 27% of the injuries, fol-

TABLE 1. Estimated incidence of occupational injuries treated in hospital emergency departments, by sex and age group of worker — United States, 1996

	Male				Female				
Age group (yrs)	No.	R(e)*	R(h)†	(95% CI§)	No.	R(e)	R(h)	(95% CI)	M:F RR¶
16–17	38,547	2.9	6.0**	4.1– 8.0	22,620	1.7	3.9**	2.8–5.0	1.5
18–19	124,266	6.2	8.5**	6.0–11.0	51,170	2.7	4.3**	3.1–5.4	2.0
20–24	381,561	5.9	6.4**	4.5– 8.2	147,598	2.6	3.2	2.4–4.0	2.0
25–34	775,698	4.4	4.2	3.3– 5.0	292,740	2.0	2.3	1.9–2.7	1.8
35–44	567,351	3.0	2.8	2.3– 3.3	265,132	1.6	1.9	1.5–2.2	1.5
45–54	276,075	2.0	1.9**	1.6– 2.3	160,416	1.3	1.5	1.2–1.8	1.3
55–64	103,867	1.6	1.6**	1.3– 2.0	66,067	1.3	1.5	1.2–1.9	1.1
65–74	14,457	0.8	1.1**	0.8– 1.3	9,089	0.7	1.2**	0.8–1.6	0.9
≥75	2,795	0.8	1.1**	0.7– 1.6	2,202	0.9	1.6	0.7–2.6	0.7
Total	**2,284,617**	**3.3**	**3.3**	**2.6– 4.0**	**1,017,035**	**1.7**	**2.1**	**1.7–2.5**	**1.6**

*Employee-based rate.
†Hour-based rate; Bureau of Labor Statistics Current Population Survey data used in the rate calculations.
§Confidence interval (calculated for the hour-based rate).
¶Rate ratio for male:female (based on hour-based rate).
**Age group rate significantly different ($p<0.05$) from the respective sex-specific overall rate.

TABLE 2. Estimated incidence of occupational injuries treated in hospital emergency departments, by anatomic site and physician diagnosis — United States, 1996

	Sprain/Strain		Laceration		Contusion/ Abrasion/ Hematoma		Dislocation fracture		Burn		Other		Total	
Anatomic site	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Hand/Finger	39,321	(1.2)	496,811	(15.1)	138,598	(4.2)	74,185	(2.3)	33,846	(1.0)	196,573	(6.0)	**979,336**	**(29.7)**
Trunk/Back/Groin	390,428	(11.8)	3,993	(0.1)	93,585	(2.8)	24,032	(0.7)	6,316	(0.2)	66,190	(2.0)	**585,543**	**(17.7)**
Head/Face/Neck	55,220	(1.7)	107,465	(3.3)	139,213	(4.2)	8,151	(0.3)	49,464	(1.5)	193,976	(5.9)	**553,490**	**(16.8)**
Arm/Wrist/Shoulder	176,191	(5.3)	73,921	(2.2)	101,853	(3.1)	48,900	(1.5)	24,170	(0.7)	64,297	(1.9)	**489,332**	**(14.8)**
Leg/Knee/Ankle	198,251	(6.0)	42,466	(1.3)	109,084	(3.3)	31,870	(1.0)	10,066	(0.3)	34,531	(1.1)	**426,268**	**(12.9)**
Others	25,485	(0.8)	6,597	(0.2)	78,083	(2.4)	32,935	(1.0)	7,744	(0.2)	118,268	(3.6)	**269,112**	**(8.2)**
Total	**884,896**	**(26.8)**	**731,253**	**(22.2)**	**660,417**	**(20.0)**	**220,073**	**(6.7)**	**131,606**	**(4.0)**	**673,835**	**(20.4)**	**3,302,080**	**(100.0)**

Nonfatal Occupational Injuries — Continued

lowed by lacerations (22%) and contusions/abrasions/hematomas (20%). Lacerations to the hands and fingers accounted for 15% of all injuries, and sprains and strains to the back, groin, and trunk accounted for an additional 12% of all cases treated in hospital EDs.

Reported by: Div of Safety Research, National Institute for Occupational Safety and Health, CDC.

Editorial Note: In 1983, NIOSH reported findings on the magnitude of nonfatal occupational injury using the 1982 NEISS data (*1*). This report examining data from 1996 is the first since then to provide national estimates, by age and sex, of the risk for occupational injuries treated in hospital EDs. These data provide a unique perspective on the study of work-related nonfatal injuries because many of the case-capture restrictions common to other sources of occupational injury surveillance data have been removed. In the NEISS, theoretically all nonfatal occupational injuries treated in participating hospital EDs are captured, irrespective of involvement of a consumer product or the worker's eligibility for Workers' Compensation.

In contrast to the system for surveillance of fatal occupational injuries, a single surveillance system capable of capturing a substantial proportion of nonfatal occupational injuries is not available (*4,6*). Analysis of the 1988 National Health Interview Survey Occupational Health Supplement indicates that approximately 34% of all occupational injuries were first treated in hospital EDs.[§] Another hospital-based surveillance system used to generate national estimates for occupational injuries is the National Hospital Ambulatory Medical Care Survey (NHAMCS). According to NHAMCS data, an estimated 4.2 million occupational injuries were treated in hospital EDs in 1996, accounting for 12% of all injuries treated in the EDs[¶] (*7*). Although the NHAMCS provides for comparisons between work-related and other injuries treated in hospital EDs, it lacks information about industry and occupation. NEISS is a continuous, ongoing surveillance system that includes industry and occupation information and readily provides a mechanism for timely telephone follow-up interviews with injured workers (*2*). Differences in the estimates produced using the NHAMCS and NEISS data may result, in part, from sensitivity or reporting differences, but additional research is necessary to clarify this issue.

Another occupational injury morbidity surveillance system is the annual survey maintained by the BLS. The annual survey is a private sector establishment-based system that collects nonfatal injury data as reported by the employers. In 1996, data from the annual survey show that 6.2 million injuries and illnesses occurred in the private sector (*8*). Although the annual survey is not limited by source of medical treatment, some categories of workers (e.g., the self-employed or farms with <11 employees) are excluded from the data, and age-specific injury rates cannot be calculated (*9*).

Overall, estimates of the national magnitude of and risk for nonfatal occupational injury and the age group distributions reported here are similar to those in the 1982 ED data (*1*). Workers at highest risk, as described in this report, are males and aged <20 years. Differences between the employee-based and hour-based injury rates were most pronounced for women and younger and older workers; these groups are more

[§]Other sources of "first medical treatment" for a work-related injury include doctors' offices/clinics (34%), worksite health clinics (14%), and walk-in clinics (9%) (NIOSH, unpublished data, 1998).

[¶]This figure may underestimate this proportion because information was missing for "work-relatedness" in 26% of the cases (*7*).

Nonfatal Occupational Injuries — Continued

likely to be part-time workers, and the use of an employee-based measure tends to overestimate their true exposure to work hazards. Overestimates of exposure (the denominator of the injury rate formula) produce artificially low injury rates (*10*). Further research is needed to examine the distributions of injured workers in various sex and age groups by occupation and industry. Although information about the industry and occupation of injured workers and characteristics of the injury events is available in the 1996 NEISS data, this information is in narrative format. Coding of these data is under way and will provide the basis for future, more detailed analysis by NIOSH. NIOSH currently uses the NEISS follow-up capabilities to conduct telephone interview studies with adolescents in the retail trades and services industries, workers aged <20 years injured on farms, and for construction workers injured in fall-related incidents. The detailed epidemiologic information that can be collected through the telephone investigations is a valuable aspect of this injury surveillance system for development of injury intervention strategies.

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Corneal Decompensation After Intraocular Ophthalmic Surgery — Missouri, 1998

During January 8–14, 1998, six of eight patients undergoing elective intraocular surgery at a Veterans Affairs medical center (VAMC) in St. Louis, Missouri, developed corneal endothelial decompensation (corneal edema and opacification) ≤24 hours after surgery. All had been operated on with instruments sterilized by the Abtox Plazlyte system (Abtox, Inc., Chicago, Illinois) (*1*). This report summarizes the results of the

Corneal Decompensation — Continued

investigation of these cases and indicates that using the Abtox Plazlyte system to sterilize opthalmologic surgical equipment led to corneal decompensation.

A case was defined as corneal endothelial decompensation within 24 hours after surgery in any patient undergoing intraocular ophthalmic surgery during January 5–14, 1998. To ascertain cases and to determine the background rate of corneal decompensation, medical records of patients undergoing ophthalmic surgery during September 1997–January 1998 were reviewed. Six cases were identified. All patients had post-operative findings of persistent low visual acuity, cloudy corneas with corneal endothelial decompensation, and iris paralysis with dilated pupils. All were male, ranged in age from 43 to 85 years (median: 67 years), and had chronic systemic diseases such as coronary artery disease and hypertension. Four patients had cataract extraction and a posterior chamber intraocular lens implant, one had repositioning of a previously implanted anterior chamber intraocular lens that had become dislocated, and one had a trabeculectomy filtering procedure for glaucoma. All had surgery performed in the same operating room. The duration of surgery ranged from 17 minutes to 3.5 hours (median: 1.5 hours). Post-operative vision (range: 20/400 to Hand Motion) was significantly worse than pre-operative vision (range: 20/40–20/200).

When case-patients were compared with six randomly selected controls who underwent surgery during January 5–14 and did not have corneal decompensation, there were no differences in type of ophthalmic surgery performed; medications used before, during, or after surgery; type of local or general anesthesia; surgeons or anesthesiologists; or scrub and circulating nurses.

All instruments used in procedures on the case-patients and controls had undergone Abtox Plazlyte sterilization (*1*). In November 1997, the hospital discontinued using ethylene oxide to sterilize instruments used in ophthalmic surgery and began using the Abtox Plazlyte sterilization method (*1,2*). From November 5, 1997, through January 14, 1998, a total of 49 patients had ophthalmic surgery that involved instruments sterilized in the Abtox Plazlyte machine. This method uses a vaporized mixture of peracetic acid, acetic acid, and hydrogen peroxide in combination with low temperature (*1,2*). The vapor is removed with argon, oxygen, and hydrogen gas (*1,2*). The Abtox Plazlyte system has not been cleared by the Food and Drug Administration (FDA) for either safety or performance. An earlier design was cleared by FDA for use only on stainless steel instruments without small hinges are small lumens, but it was never distributed by Abtox. Instruments routinely used in ophthalmic surgery often have small hinges and small lumens. In addition, ophthalmic cannulas (small-lumen instruments) may have nickel- and chrome-plated brass hubs. Brass can be oxidized to yield copper and zinc compounds. Preliminary results using inductively coupled plasma atomic emission spectrometer analyses performed at CDC revealed copper and zinc in water rinsed through cannulas sterilized in the Abtox Plazlyte system. When this rinsate was infused into human and rabbit corneas, corneal decompensation occurred. Further laboratory testing is under way.

On January 14, 1998, the use of the Abtox system was discontinued at the St. Louis VAMC, and ophthalmic instruments were sterilized by steam autoclave. No additional cases have occurred. Abtox is conducting a field correction of the device that includes revised labeling that contraindicates use for ophthalmic instruments.

Reported by: A Lubniewski, MD, S Sides, C Fisher, A Tess, MPH, T Lewis, L Kuhn, R Lusk, MD, Veterans Affairs Medical Center, St. Louis, Missouri; D Donnell, MD, D Dodson, Missouri Dept

Corneal Decompensation — Continued

of Health. H Edelhauser, PhD, N Anderson, MD, Dept of Ophthalmology, Emory Univ, Atlanta, Georgia. Hospital Infections Program, National Center for Infectious Diseases; Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health; Div of Environmental Health Laboratory Sciences, National Center for Environmental Health; and EIS officers, CDC.

Editorial Note: Corneal endothelial decompensation is manifested by opacity of the cornea; it can be a nonspecific response to mechanical or chemical injury (*3*). Mechanical trauma can result from incidental corneal contact by intraocular instruments during surgery; chemical injury can result from the improper use of intraocular drugs, drugs containing preservatives, or from residues from inadequate rinsing of detergents or other residues from surgical instruments (*3,4*). When severe, corneal endothelial decompensation requires corneal transplantation. Of the estimated 1.4 million cataract surgeries performed in the United States each year (*5*), <0.05% are complicated by corneal endothelial decompensation (A. Lubniewski, Veterans Affairs Medical Center, St. Louis, Missouri; and H. Edelhauser, Emory University, Atlanta, Georgia, personal communication, 1998).

Steam autoclaving is the preferred method for sterilizing surgical instruments. Ethylene oxide sterilization can be used for heat-sensitive items. However, because of the environmentally harmful effects of ethylene oxide, the Environmental Protection Agency encourages health-care providers to reduce the use of this form of sterilization. CDC's National Institute for Occupational Safety and Health considers ethylene oxide to be an occupational carcinogen and reproductive toxin (*6,7*). Since the early 1990s, new types of sterilization using plasma gas technology, such as the Abtox Plazlyte system, have been introduced (*1,2*). The inductively coupled plasma atomic emission data obtained from the CDC laboratory analyses, in part, prompted the FDA to issue a safety alert about the use of the Abtox Plazlyte Sterilization system to sterilize ophthalmic instruments (*8*).

To ascertain the extent of this problem, all episodes of corneal decompensation following ophthalmic surgery and information about type of sterilization method used should be reported through state health departments to CDC's Hospital Infections Program, National Center for Infectious Diseases, telephone (404) 639-6413, and to FDA's MedWatch, telephone (800) 332-1088.

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Diagnosis and Reporting of HIV and AIDS in States with Integrated HIV and AIDS Surveillance — United States, January 1994–June 1997

Recent reports based on acquired immunodeficiency syndrome (AIDS) surveillance data have highlighted substantial declines in AIDS incidence and deaths. As a result of improvements in treatment and care of persons infected with human immunodeficiency virus (HIV), surveillance of AIDS alone no longer accurately reflects the magnitude or direction of the epidemic (*1*). Current public health and clinical recommendations promote early diagnosis and treatment of HIV disease (*2*). Data on persons in whom HIV infection is diagnosed before AIDS is diagnosed are needed to determine populations in need of prevention and treatment services. This report examines data for persons aged ≥13 years in whom HIV infection was diagnosed in 25 states that conducted name-based HIV surveillance in addition to AIDS surveillance during January 1994–June 1997*. Provisional data indicate that declines in AIDS incidence in these states were not accompanied by comparable declines in the number of newly diagnosed HIV cases.†

In late 1993, the states included in this analysis merged data from the name-based HIV and AIDS case reporting systems into an integrated HIV/AIDS surveillance system. Patient and provider names were deleted before states forwarded data to CDC and replaced by codes. Cases were divided into two mutually exclusive categories: persons in whom HIV infection was diagnosed (without an AIDS diagnosis) and persons in whom HIV infection was diagnosed only when they first had AIDS diagnosed. Data for persons aged ≥13 years were analyzed by the earliest date of diagnosis of HIV or AIDS for January 1994–June 1997. Quarterly trends in the number of persons whose initial diagnosis was HIV infection were compared with quarterly trends in the number of persons whose initial diagnosis was AIDS. HIV and AIDS data were adjusted for delays in reporting of cases and deaths (*3*).

From January 1994 through June 1997, HIV or AIDS was diagnosed in 72,905 persons aged ≥13 years in the 25 states. Of these, HIV infection was the initial diagnosis in 52,690 (72%) and AIDS was the initial diagnosis in 20,215 (28%) (Table 1). From 1995 to 1996, the number of persons in whom HIV infection was the initial diagnosis de-

*Alabama, Arizona, Arkansas, Colorado, Idaho, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

†Single copies of this report will be available until April 24, 1999, from the CDC Prevention Information Network, P.O. Box 6003, Rockville, MD 20849-6003; telephone (800) 458-5231 or (301) 519-0459.

Diagnosis and Reporting of HIV and AIDS — Continued

TABLE 1. Estimated number* of persons aged ≥13 years in whom HIV was diagnosed, by quarter of diagnosis and disease status at initial diagnosis† — 25 states§, January 1994–June 1997

	Disease status at initial HIV diagnosis				
	HIV		AIDS		
Quarter of diagnosis	No.	(%)	No.	(%)	Total
1994					
1	4,038	(70)	1,723	(30)	5,761
2	4,073	(71)	1,691	(29)	5,764
3	3,809	(73)	1,430	(27)	5,239
4	3,558	(71)	1,434	(29)	4,992
Total¶	**15,571**	**(71)**	**6,337**	**(29)**	**21,908**
1995					
1	3,904	(71)	1,568	(29)	5,472
2	3,780	(72)	1,470	(28)	5,250
3	3,711	(72)	1,421	(28)	5,132
4	3,438	(72)	1,370	(28)	4,808
Total¶	**14,895**	**(72)**	**5,863**	**(28)**	**20,758**
1996					
1	3,889	(74)	1,366	(26)	5,255
2	3,635	(72)	1,382	(28)	5,017
3	3,619	(73)	1,310	(27)	4,929
4	3,476	(74)	1,236	(26)	4,712
Total¶	**14,652**	**(74)**	**5,313**	**(26)**	**19,965**
1997					
1	3,762	(73)	1,376	(27)	5,138
2	3,809	(74)	1,325	(26)	5,134
Total	**52,690**	**(72)**	**20,215**	**(28)**	**72,905**

*Numbers are estimates after adjustments for reporting delays. Point estimates are presented for reproducibility of the data.

†For persons who had not had an HIV diagnosis before being diagnosed with AIDS, their AIDS diagnosis date is considered their earliest HIV diagnosis date; for persons initially reported with HIV who subsequently had AIDS diagnosed and reported, they are presented by the earliest diagnosis date, which is their HIV diagnosis.

§Alabama, Arizona, Arkansas, Colorado, Idaho, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

¶Total estimates include cases with missing quarter for HIV diagnoses and AIDS diagnoses.

clined 2%, and the number of persons in whom AIDS was the initial diagnosis declined 9%.

Of 52,690 persons in whom HIV infection was the initial diagnosis, 28% were women, 57% were non-Hispanic blacks, and 18% were infected through heterosexual contact (Table 2). Among selected demographic groups, the number of persons in whom HIV infection was the initial diagnosis during 1995 compared with 1996 declined 3% among men (from 10,762 to 10,395) but increased 3% among women (from 4126 to 4253). The number of persons in whom HIV infection was the initial diagnosis increased 10% among Hispanics (from 971 to 1070) and decreased 3% among non-

Diagnosis and Reporting of HIV and AIDS — Continued

TABLE 2. Characteristics of persons aged ≥13 years with HIV, by disease status at initial diagnosis* — 25 states†, January 1994–June 1997

Characteristic	Disease status at initial HIV diagnosis				
	HIV		AIDS		
	No.§	(%¶)	No.§	(%¶)	Total
Sex					
Male	37,996	(72)	16,866	(83)	**54,862**
Female	14,689	(28)	3,348	(17)	**18,037**
Race/Ethnicity**					
White, non-Hispanic	17,929	(34)	9,171	(45)	**27,100**
Black, non-Hispanic	30,229	(57)	9,127	(45)	**39,356**
Hispanic	3,581	(7)	1,660	(8)	**5,241**
Other/Unknown	949	(2)	256	(1)	**1,205**
Risk/Exposure category					
Men having sex with men	17,098	(32)	8,866	(44)	**25,964**
Injecting-drug user	9,671	(18)	3,959	(20)	**13,630**
Men having sex with men/ Injecting-drug user	2,088	(4)	843	(4)	**2,931**
Heterosexual contact	9,279	(18)	2,428	(12)	**11,707**
Other/Unreported	14,552	(28)	4,116	(20)	**18,668**
Age group (yrs)					
13–24	7,200	(14)	653	(3)	**7,853**
25–29	9,384	(18)	2,239	(11)	**11,623**
30–34	11,916	(23)	4,503	(22)	**16,419**
35–39	10,030	(19)	4,608	(23)	**14,638**
≥40	14,159	(27)	8,210	(41)	**22,369**
Total††	**52,690**		**20,215**		**72,905**

*For persons who had not had an HIV diagnosis before being diagnosed with AIDS, their AIDS diagnosis date is considered their earliest HIV diagnosis date; for persons initially reported with HIV who subsequently had AIDS diagnosed and reported, they are presented by the earliest diagnosis date, which is their HIV diagnosis.

†Alabama, Arizona, Arkansas, Colorado, Idaho, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

§Numbers are estimates after adjustments for reporting delays. Point estimates are presented for reproducibility of the data.

¶Percentages may not total 100 because of rounding.

**Persons of races other than black and white were included under "other/unknown" because estimates were too small for meaningful analysis.

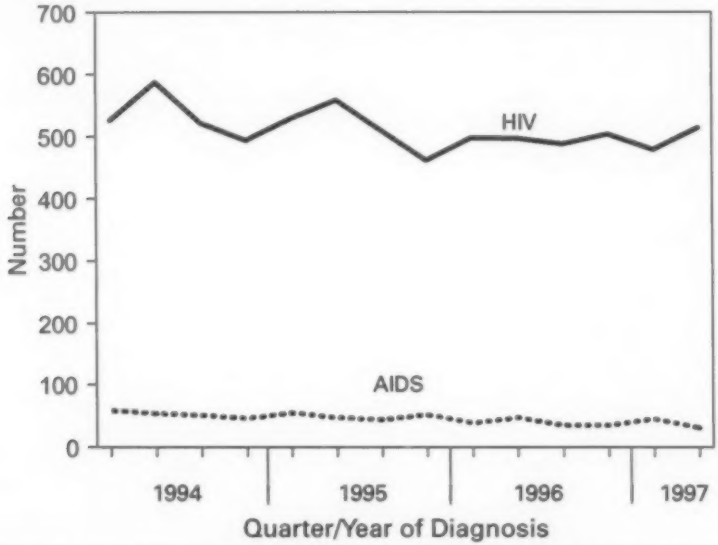
††Column totals include missing/other for some categories (e.g., missing sex). Persons infected through receipt of blood or blood products are included under other/unreported risk.

Hispanic blacks (from 8569 to 8300) and 2% among non-Hispanic whites (from 5093 to 4966). Men who have sex with men (MSM) accounted for the largest proportion of the HIV diagnoses (32%). Analysis of trends by risk/exposure category is complicated by the high proportion of HIV cases with unreported risk (28%).

Of 52,690 persons in whom HIV infection was the initial diagnosis, 7200 (14%) were aged 13–24 years. The number of HIV diagnoses per quarter-year was approximately

Diagnosis and Reporting of HIV and AIDS — Continued

FIGURE 1. Estimated number of persons aged 13–24 years with HIV infection, by disease status at the time of initial diagnosis with HIV — 25 states*, January 1994–June 1997†



*Alabama, Arizona, Arkansas, Colorado, Idaho, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.
†Adjusted for reporting delays.

constant in this age group, declining 4% from 1995 to 1996 (from 2066 to 1991) (Figure 1). Of persons in this age group, 3203 (44%) were female, 4566 (63%) were non-Hispanic black, and 394 (5%) were Hispanic; by risk category, 2270 (31%) were MSM, 1886 (26%) acquired HIV through heterosexual contact, and 449 (6%) were injecting-drug users; 1074 (15%) had AIDS subsequently diagnosed. An additional 653 persons aged 13–24 years had AIDS initially diagnosed.

Reported by: State and local health departments; Div of HIV/AIDS Prevention—Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: The data from these 25 states indicate that from 1994 through mid-1997, the number of persons in whom HIV infection was the initial diagnosis was stable and declines over the entire period were slight. Compared with reported declines in AIDS incidence nationally (*1*), these data suggest that HIV incidence was relatively stable in these states. In particular, the number of new HIV diagnoses among persons aged 13–24 years probably more closely indicate HIV incidence trends because young persons have more recently initiated high-risk behaviors.

HIV surveillance data include persons who were infected more recently than were persons reported with AIDS, and their characteristics indicate more recent trends in

Diagnosis and Reporting of HIV and AIDS — Continued

HIV transmission. Many of the new HIV diagnoses in these states occurred among blacks, women, young MSM, and persons infected through heterosexual contact with substantial increases observed among Hispanics. The HIV case data from these states reflect the changing demographic and risk profile of an epidemic that disproportionately affects racial/ethnic minorities (*1,3*). Race/ethnicity is not a risk factor for HIV infection but is likely a marker for other factors that may be predictive of increased risk for HIV infection (e.g., low income, lack of education, and higher rates of injecting and non-injecting drug use) (*4*). Black and Hispanic persons who engage in high-risk sex or drug-using behaviors should be a major focus of HIV-prevention efforts, including strategies to promote knowledge of HIV status through voluntary test seeking and to facilitate entry to care and treatment.

Of persons in whom HIV infection was the initial diagnosis, 14% were adolescents and young adults aged 13–24 years, compared with 3% of persons in whom AIDS was the initial diagnosis. This age group is an important target for HIV prevention efforts because a large proportion of all new HIV infections occur among persons in this age group (*5*). In particular, reduction of high-risk sexual behaviors among adolescent and young adult women and MSM is needed to reduce HIV transmission in this age group.

In the 25 states, declines in the number of cases were larger among persons in whom AIDS was the initial diagnosis than among those in whom HIV infection was the initial diagnosis. Most persons with HIV had been tested in a medical facility or other clinical-care setting and had had an opportunity for early treatment interventions to delay HIV-related morbidity and mortality, contributing to declines in AIDS incidence (*6*). In the future, AIDS surveillance data will increasingly reflect access to testing and response to therapy in the population. Approximately one fourth of all new diagnoses in these states occurred among persons who had already developed AIDS when HIV infection was first diagnosed. AIDS surveillance data should be used to target underserved populations for early testing and prompt referrals for treatment.

HIV and AIDS surveillance data mostly reflect the characteristics of persons tested in medical care and other confidential settings. These data may not represent the characteristics of all persons with HIV infection because persons tested anonymously are not reported to the surveillance system, and some persons with HIV infection have not been tested. However, approximately 140,000 persons living with HIV have already been reported and characterized, representing most prevalent infections in these states (*7*). The degree to which integrated HIV and AIDS surveillance data are representative of all infected persons is expected to increase over time as the proportion of untested persons decreases.

The public health usefulness of the HIV surveillance data is affected by the performance of the system of case reporting and follow up (*8*). In these 25 states, most of which require laboratory-based reporting of HIV-positive test results, HIV reporting was very complete. Only 12% of persons in whom HIV infection was the initial diagnosis had not been reported to CDC as an HIV case before being reported as an AIDS case. CDC estimates that <2% of HIV cases are duplicates based on matching of the national coded surveillance database. CDC has developed methods for estimating the risk distribution for AIDS cases with unreported risk (*3*); however, similar methods for HIV cases are not yet available. In this report, the proportion of HIV cases by risk/exposure categories is an underestimate until follow up is completed for cases reported without risks (*3*). Name-based HIV reporting should facilitate epidemiologic

Diagnosis and Reporting of HIV and AIDS — Continued

follow up to increase the completeness of risk/exposure, clinical, treatment, and other data relevant to effective HIV-prevention community planning.

This report highlights the continued need for effective HIV and AIDS prevention programs to reduce rates of HIV transmission and demonstrates the usefulness of integrated HIV and AIDS surveillance data to direct these efforts. State and local areas without such surveillance have limited ability to monitor local changes in HIV infection and disease trends. In these areas, approximately 200,000 persons have had HIV diagnosed (without AIDS) (*7*), but data are not available to describe trends in new HIV diagnoses. Implementing integrated HIV and AIDS surveillance in these states and local areas is necessary to provide accurate information for targeting resources to populations most affected (e.g., adolescents, women, racial/ethnic minorities, and young MSM) and for evaluating program effectiveness.

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Notice to Readers

Availability of Report on Health Promotion

"Health Promotion in the City," a report prepared for CDC, is a review of current practice and recommendations for new directions to improve the health of urban populations. The report describes social and economic factors that have influenced the health of urban populations during the previous 40 years, assesses the extent to which existing interventions address major causes of ill health, and explores new sources for theory and practice for urban health promotion. The report suggests specific actions that community leaders and organizations, local and state health departments, public health officials, federal agencies, foundations, and universities can take to strengthen health promotion practices in urban communities in the United States.

Copies of this report are available from CDC's Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, 4770 Buford Highway, N.E., Mailstop K-45, Atlanta, GA 30341-3724; telephone (770) 488-5269.

Notice to Readers

Epidemiology in Action Course

CDC and Emory University will cosponsor an applied epidemiology course designed for practicing state and local health department professionals. This course, "Epidemiology in Action," will be held at CDC during November 2–13, 1998. The course emphasizes the practical application of epidemiology to public health problems and comprises lectures, workshops, classroom exercises (including actual epidemiologic problems), roundtable discussions, and computer labs. Topics covered include descriptive epidemiology and biostatistics, analytic epidemiology, epidemic investigations, public health surveillance, surveys and sampling, computers and Epi Info software, and discussions of selected prevalent diseases. There is a tuition charge.

Applications must be received by September 11, 1998. Additional information and applications are available from Department PSB, Rollins School of Public Health, Emory University, 7th floor, 1518 Clifton Road, N.E., Atlanta GA 30322; telephone (404) 727-3485; fax (404) 727-4590; or email ogostan@sph.emory.edu.

Addendum: Vol. 47, No. RR-2

In the *MMWR Recommendations and Reports*, "Public Health Service Task Force Recommendations for the Use of Antiretroviral Drugs in Pregnant Women Infected with HIV-1 for Maternal Health and for Reducing Perinatal HIV-1 Transmission in the United States," the following names should be added as persons who presented data at the Public Health Service Task Force meeting on May 9, 1997: Robert Coombs, MD, PhD; Rhoda Sperling, MD; David Shapiro, PhD; Miriam Poirer, PhD; Kenneth Ayers, DVM; and David Morse, PhD.

Erratum: Vol. 47, No. RR-4

In the *MMWR Recommendations and Reports*, "Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection," on page 8 in Table 2 a typesetting error occurred in the third bulleted item under Category B: Moderately Symptomatic. Following is the corrected table.

TABLE 2. 1994 Revised human immunodeficiency virus pediatric classification system: clinical categories*

Category N: Not Symptomatic

Children who have no signs or symptoms considered to be the result of HIV infection or who have only **one** of the conditions listed in category A.

Category A: Mildly Symptomatic

Children with **two** or more of the following conditions but none of the conditions listed in categories B and C:

- Lymphadenopathy (≥0.5 cm at more than two sites; bilateral=one site)
- Hepatomegaly
- Splenomegaly
- Dermatitis
- Parotitis
- Recurrent or persistent upper respiratory infection, sinusitis, or otitis media

Category B: Moderately Symptomatic

Children who have symptomatic conditions other than those listed for category A or category C that are attributed to HIV infection. Examples of conditions in clinical category B include but are not limited to the following:

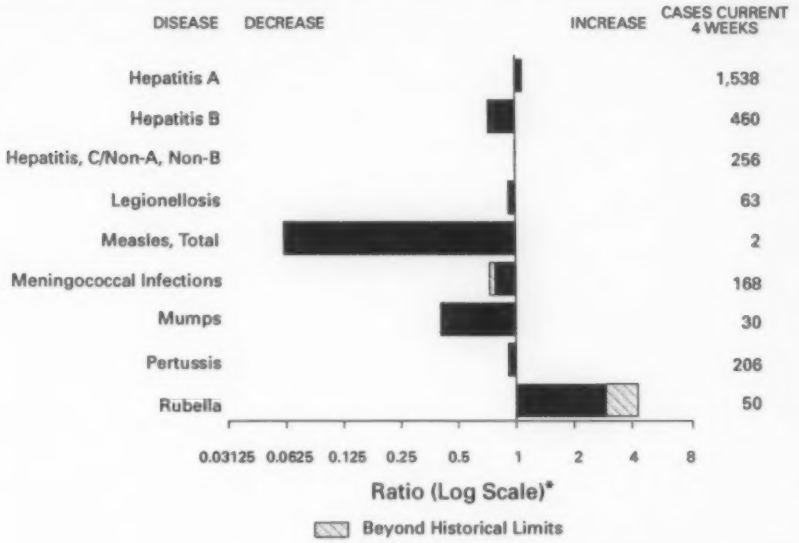
- Anemia (<8 gm/dL), neutropenia (<1,000/mm^3), or thrombocytopenia (<100,000/mm^3) persisting ≥30 days
- Bacterial meningitis, pneumonia, or sepsis (single episode)
- Candidiasis, oropharyngeal (i.e., thrush) persisting for >2 months in children aged >6 months
- Cardiomyopathy
- Cytomegalovirus infection with onset before age 1 month
- Diarrhea, recurrent or chronic
- Hepatitis
- Herpes simplex virus (HSV) stomatitis, recurrent (i.e., more than two episodes within 1 year)
- HSV bronchitis, pneumonitis, or esophagitis with onset before age 1 month
- Herpes zoster (i.e., shingles) involving at least two distinct episodes or more than one dermatome
- Leiomyosarcoma
- Lymphoid interstitial pneumonia (LIP) or pulmonary lymphoid hyperplasia complex
- Nephropathy
- Nocardiosis
- Fever lasting >1 month
- Toxoplasmosis with onset before age 1 month
- Varicella, disseminated (i.e., complicated chickenpox)

Category C: Severely Symptomatic

Children who have any condition listed in the 1987 surveillance case definition for acquired immunodeficiency syndrome, with the exception of LIP (which is a category B condition).

*Modified from: CDC. 1994 Revised classification system for human immunodeficiency virus infection in children less than 13 years of age. MMWR 1994;43(no. RR-12):1–10.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending April 18, 1998, with historical data — United States



*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending April 18, 1998 (15th Week)

	Cum. 1998		Cum. 1998
Anthrax	-	Plague	-
Brucellosis	4	Poliomyelitis, paralytic[¶]	-
Cholera	-	Psittacosis	12
Congenital rubella syndrome	1	Rabies, human	-
Cryptosporidiosis*	520	Rocky Mountain spotted fever (RMSF)	16
Diphtheria	-	Streptococcal disease, invasive Group A	687
Encephalitis: California*	-	Streptococcal toxic-shock syndrome*	18
eastern equine*	-	Syphilis, congenital**	10
St. Louis*	-	Tetanus	4
western equine*	-	Toxic-shock syndrome	35
Hansen Disease	38	Trichinosis	2
Hantavirus pulmonary syndrome*†	-	Typhoid fever	88
Hemolytic uremic syndrome, post-diarrheal*	5	Yellow fever	-
HIV infection, pediatric*§	72		

-:no reported cases
*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§ Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update March 29, 1998.
¶ One suspected case of polio with onset in 1998 has also been reported to date.
**Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 18, 1998, and April 12, 1997 (15th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS[†]	PHLIS[§]				
	Cum. 1998*	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1998	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997
UNITED STATES	12,103	16,345	141,420	128,190	223	87	84,947	79,198	1,218	764
NEW ENGLAND	320	461	5,322	5,071	26	11	1,393	1,748	16	22
Maine	9	18	268	283	1	-	13	14	-	-
N.H.	13	4	277	220	5	2	27	46	-	2
Vt.	9	10	101	121	-	-	6	15	-	1
Mass.	98	217	2,555	2,103	10	9	613	679	16	17
R.I.	32	43	662	610	3	-	88	157	-	2
Conn.	161	169	1,459	1,734	7	-	646	837	-	-
MID. ATLANTIC	3,425	5,157	18,802	16,255	17	5	10,409	10,116	109	70
Upstate N.Y.	425	845	N	N	14	-	1,510	1,637	93	51
N.Y. City	1,936	2,636	10,465	8,699	-	3	4,587	4,124	-	-
N.J.	580	1,109	2,231	3,024	3	2	1,597	2,062	-	-
Pa.	484	567	6,106	4,532	N	-	2,715	2,273	16	19
E.N. CENTRAL	995	1,213	23,955	20,804	38	11	16,996	12,437	129	195
Ohio	189	251	7,078	6,568	14	2	4,380	4,034	5	5
Ind.	261	253	2,706	2,541	6	3	1,769	1,748	3	4
Ill.	376	369	6,861	3,207	10	-	5,476	1,844	5	27
Mich.	143	248	5,392	5,425	8	2	4,686	3,766	116	148
Wis.	46	92	1,898	3,065	N	4	703	1,245	-	11
W.N. CENTRAL	215	367	8,882	9,022	27	12	4,108	3,763	84	18
Minn.	32	54	1,521	2,148	10	6	526	717	-	-
Iowa	11	51	1,217	1,436	2	-	372	365	8	9
Mo.	101	194	3,514	3,286	5	5	2,274	1,924	73	1
N. Dak.	3	3	215	276	1	1	18	19	-	2
S. Dak.	7	2	466	310	-	-	79	35	-	-
Nebr.	28	28	806	546	4	-	317	222	1	1
Kans.	35	35	1,143	1,022	5	-	522	481	2	5
S. ATLANTIC	3,235	4,175	29,874	24,178	23	9	24,070	24,013	46	54
Del.	40	51	724	-	-	1	396	299	-	-
Md.	334	435	2,394	2,002	9	4	2,676	3,673	3	5
D.C.	266	244	N	N	-	-	1,007	1,268	-	-
Va.	231	325	3,052	3,217	N	4	1,992	2,498	1	4
W. Va.	30	21	823	947	N	-	223	281	3	1
N.C.	217	218	6,499	5,002	7	-	5,406	4,571	7	17
S.C.	187	211	5,243	3,535	1	-	3,355	3,106	-	14
Ga.	371	529	6,270	2,402	2	-	5,212	3,378	8	-
Fla.	1,559	2,141	4,869	7,073	4	-	3,801	4,939	24	13
E.S. CENTRAL	444	472	11,163	9,402	17	3	10,691	9,566	33	97
Ky.	65	48	1,799	1,833	3	-	1,027	1,246	4	5
Tenn.	144	200	3,638	3,418	10	3	3,096	2,955	26	54
Ala.	119	129	2,995	2,334	4	-	3,795	3,203	3	5
Miss.	116	95	2,731	1,817	-	-	2,773	2,162	-	33
W.S. CENTRAL	1,370	1,463	16,056	14,943	9	1	10,142	10,142	321	67
Ark.	52	58	998	716	1	-	1,091	1,234	-	1
La.	212	239	3,144	2,002	-	-	2,702	1,928	-	47
Okla.	71	86	2,677	2,216	1	1	1,481	1,443	-	3
Tex.	1,035	1,080	9,237	10,009	7	-	4,868	5,537	321	16
MOUNTAIN	389	461	5,457	7,106	16	10	2,002	2,202	240	92
Mont.	10	12	330	254	1	-	17	13	4	3
Idaho	8	8	534	448	2	-	48	33	77	14
Wyo.	1	9	206	133	-	-	11	17	104	34
Colo.	65	128	-	1,065	2	1	722	583	9	13
N. Mex.	55	35	1,117	1,136	5	3	201	373	23	15
Ariz.	128	122	2,676	2,809	N	2	908	897	-	8
Utah	36	35	454	432	4	1	47	49	12	2
Nev.	87	112	140	829	2	3	48	237	11	3
PACIFIC	1,710	2,576	21,909	21,409	50	25	5,136	5,211	240	149
Wash.	137	175	3,143	2,684	14	11	546	616	5	7
Oreg.	40	97	1,613	1,374	11	8	230	190	2	1
Calif.	1,499	2,269	16,108	16,495	25	3	4,173	4,141	198	92
Alaska	11	18	568	406	-	-	88	138	1	-
Hawaii	23	17	477	450	N	3	99	126	34	49
Guam	-	2	8	129	N	-	2	15	-	-
P.R.	460	419	U	U	-	U	94	170	1	22
V.I.	13	16	N	N	N	U	-	-	-	-
Amer. Samoa	-	-	-	-	N	U	-	-	-	-
C.N.M.I.	-	-	N	N	N	U	7	11	-	2

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update March 29, 1998.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending April 18, 1998, and April 12, 1997 (15th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998*	Cum. 1997	Cum. 1998
UNITED STATES	282	236	984	855	282	347	1,930	2,532	1,501	4,264	1,985
NEW ENGLAND	17	18	174	153	12	12	20	43	61	98	383
Maine	1	1	-	2	1	-	1	-	U	10	62
N.H.	2	2	5	4	2	1	-	-	2	1	33
Vt.	1	3	2	2	-	1	-	-	1	-	21
Mass.	3	7	47	30	9	9	17	20	46	46	106
R.I.	4	1	19	27	-	1	-	-	12	7	27
Conn.	6	4	101	88	-	-	2	23	U	34	134
MID. ATLANTIC	62	39	627	574	78	82	74	119	129	727	443
Upstate N.Y.	19	8	380	67	24	13	4	14	U	84	304
N.Y. City	6	1	-	43	35	48	16	20	U	401	U
N.J.	2	5	3	132	8	15	18	61	129	157	57
Pa.	35	25	244	332	9	6	36	24	U	85	82
E.N. CENTRAL	93	99	22	10	19	34	289	225	80	438	15
Ohio	44	47	21	5	2	3	54	72	5	103	14
Ind.	16	12	1	4	1	4	54	49	U	39	-
Ill.	5	4	-	1	5	13	114	19	75	202	-
Mich.	20	27	-	-	10	12	52	35	U	66	-
Wis.	8	9	U	U	1	2	15	50	U	28	1
W.N. CENTRAL	21	15	6	8	15	9	47	57	52	126	176
Minn.	1	-	1	7	8	4	-	14	U	34	30
Iowa	1	2	4	-	2	2	-	3	U	15	33
Mo.	8	3	-	-	3	2	37	27	47	46	10
N. Dak.	-	1	-	-	-	-	-	-	U	2	39
S. Dak.	-	1	-	-	-	-	-	-	4	2	33
Nebr.	8	5	-	1	-	1	4	-	1	4	-
Kans.	3	3	1	-	2	-	6	13	U	23	31
S. ATLANTIC	45	28	108	78	74	75	779	1,012	277	727	678
Del.	6	3	-	14	1	2	7	8	-	8	17
Md.	8	10	89	53	24	25	187	290	69	68	149
D.C.	3	1	4	4	4	5	28	35	31	22	-
Va.	3	3	3	-	9	18	55	89	53	86	193
W. Va.	N	N	2	-	-	-	-	2	18	15	28
N.C.	4	5	1	2	7	5	223	211	106	98	136
S.C.	4	2	-	1	-	4	88	111	U	68	41
Ga.	-	-	2	1	12	10	122	180	U	117	43
Fla.	17	4	7	3	17	6	69	86	U	245	71
E.S. CENTRAL	4	8	12	17	7	9	354	556	-	316	70
Ky.	1	-	2	1	-	3	40	48	U	45	13
Tenn.	3	3	5	3	4	2	177	222	U	116	38
Ala.	-	2	5	2	3	1	76	145	U	102	19
Miss.	-	3	-	11	-	3	61	141	U	53	-
W.S. CENTRAL	2	1	1	2	6	5	200	370	25	630	56
Ark.	-	-	-	-	-	1	45	50	25	59	1
La.	-	-	-	1	3	3	87	126	-	31	-
Okla.	-	1	-	-	1	1	13	35	U	47	55
Tex.	2	-	1	1	2	-	55	159	U	493	-
MOUNTAIN	16	16	1	1	15	19	61	48	71	115	45
Mont.	1	1	-	-	-	2	-	-	2	2	15
Idaho	-	1	-	-	1	-	-	-	3	2	-
Wyo.	1	1	-	-	-	1	-	-	1	1	29
Colo.	4	4	-	-	5	10	4	2	U	24	-
N. Mex.	1	-	-	-	6	2	-	-	7	5	-
Ariz.	2	4	-	-	2	1	54	39	40	49	1
Utah	6	4	-	-	1	-	2	1	18	4	-
Nev.	1	1	1	1	-	3	1	6	U	28	-
PACIFIC	22	12	33	12	58	102	106	102	806	1,087	119
Wash.	2	2	1	-	2	2	6	5	U	77	-
Oreg.	-	-	1	5	6	7	2	3	U	36	-
Calif.	20	9	31	7	50	91	98	93	747	882	109
Alaska	-	-	-	-	-	2	-	-	11	28	10
Hawaii	-	1	-	-	-	-	-	1	48	64	-
Guam	-	-	-	-	-	-	-	2	-	13	-
P.R.	-	-	-	-	-	3	79	62	-	-	21
V.I.	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	1	3	8	-	-

N: Not notifiable U: Unavailable - : no reported cases

*Additional information about areas displaying "U" for cumulative 1998 Tuberculosis cases can be found in Notice to Readers, *MMWR* Vol. 47, No. 2, p. 39.

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 18, 1998, and April 12, 1997 (15th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1998*	Cum. 1997	Cum. 1998	Cum. 1997	Cum. 1998	Cum. 1997	1998	Cum. 1998	1998	Cum. 1998	Cum. 1998	Cum. 1997
UNITED STATES	329	346	5,696	7,689	1,995	2,476	-	3	1	9	12	24
NEW ENGLAND	20	20	91	186	18	55	-	-	-	1	1	-
Maine	2	2	10	17	-	3	-	-	-	-	-	-
N.H.	1	2	6	9	5	5	-	-	-	-	-	-
Vt.	2	-	6	4	-	1	-	-	-	-	-	-
Mass.	13	14	20	100	7	29	-	-	-	1	1	-
R.I.	2	1	7	11	6	6	-	-	-	-	-	-
Conn.	-	1	42	45	-	11	-	-	-	-	-	-
MID. ATLANTIC	44	44	372	682	254	380	-	-	-	1	1	10
Upstate N.Y.	16	1	106	56	90	55	-	-	-	-	-	3
N.Y. City	9	18	89	351	65	164	-	-	-	-	-	5
N.J.	17	15	82	103	-	76	-	-	-	-	-	1
Pa.	2	10	95	172	99	85	-	-	-	1	1	1
E.N. CENTRAL	51	53	701	1,002	208	502	-	-	1	2	2	6
Ohio	25	25	113	136	24	28	-	-	-	-	-	-
Ind.	9	4	66	90	20	34	-	-	1	1	1	-
Ill.	16	16	92	262	29	99	-	-	-	-	-	5
Mich.	-	8	384	448	130	155	-	-	-	1	1	1
Wis.	1	-	46	66	5	186	-	-	-	-	-	-
W.N. CENTRAL	20	11	531	535	108	164	-	-	-	-	-	1
Minn.	10	2	22	35	10	5	-	-	-	-	-	-
Iowa	1	3	237	73	14	11	-	-	-	-	-	-
Mo.	5	2	212	305	66	129	-	-	-	-	-	1
N. Dak.	-	-	2	5	1	1	-	-	-	-	-	-
S. Dak.	-	2	3	6	1	-	-	-	-	-	-	-
Nebr.	-	1	13	21	4	7	-	-	-	-	-	-
Kans.	4	1	42	90	12	11	-	-	-	-	-	-
S. ATLANTIC	76	69	524	420	295	281	-	1	-	4	5	-
Del.	-	-	1	10	-	2	-	-	-	-	-	-
Md.	18	25	112	105	43	49	-	-	-	1	1	-
D.C.	-	-	19	11	4	18	-	-	-	-	-	-
Va.	10	5	83	52	30	32	-	-	-	2	2	-
W. Va.	2	2	-	5	2	6	-	-	-	-	-	-
N.C.	9	12	28	61	69	63	-	-	-	-	-	-
S.C.	1	3	11	35	-	28	-	-	-	-	-	-
Ga.	17	16	111	40	59	14	-	-	-	1	1	-
Fla.	19	6	159	101	88	69	-	1	-	-	1	-
E.S. CENTRAL	18	19	113	186	139	178	-	-	-	-	-	1
Ky.	2	3	1	25	7	11	-	-	-	-	-	-
Tenn.	11	11	81	98	107	112	-	-	-	-	-	-
Ala.	5	5	31	35	25	24	-	-	-	-	-	1
Miss.	-	-	-	28	-	31	U	-	U	-	-	-
W.S. CENTRAL	17	17	861	1,132	269	159	-	-	-	-	-	-
Ark.	-	1	15	72	20	17	-	-	-	-	-	-
La.	7	1	8	61	8	36	U	-	U	-	-	-
Okla.	9	13	148	494	16	9	-	-	-	-	-	-
Tex.	1	2	690	505	225	97	-	-	-	-	-	-
MOUNTAIN	50	40	970	1,210	239	246	-	-	-	-	-	-
Mont.	-	-	10	35	2	2	-	-	-	-	-	-
Idaho	-	-	68	55	10	7	-	-	-	-	-	-
Wyo.	-	1	18	14	6	6	-	-	-	-	-	-
Colo.	10	5	78	144	31	50	-	-	-	-	-	-
N. Mex.	1	2	54	76	98	80	-	-	-	-	-	-
Ariz.	31	12	633	540	57	55	-	-	-	-	-	-
Utah	4	3	60	246	19	30	-	-	-	-	-	-
Nev.	4	17	49	100	16	16	U	-	U	-	-	-
PACIFIC	33	73	1,533	2,336	465	511	-	2	-	1	3	6
Wash.	1	1	275	154	38	16	-	-	-	-	-	-
Oreg.	19	14	115	122	38	36	-	-	-	-	-	-
Calif.	10	55	1,122	1,998	383	447	-	2	-	1	3	3
Alaska	1	1	3	13	2	8	-	-	-	-	-	-
Hawaii	2	2	18	49	4	4	-	-	-	-	-	3
Guam	-	-	-	-	-	1	U	-	U	-	-	-
P.R.	-	-	9	109	168	393	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	U	-	U	-	-	-
Amer. Samoa	-	-	-	-	-	-	U	-	U	-	-	-
C.N.M.I.	-	4	-	1	7	16	U	-	U	-	-	1

N: Not notifiable U: Unavailable -: no reported cases

*Of 79 cases among children aged <5 years, serotype was reported for 37 and of those, 20 were type b.

†For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 18, 1998, and April 12, 1997 (15th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1998	Cum. 1997	1998	Cum. 1998	Cum. 1997	1998	Cum. 1998	Cum. 1997	1998	Cum. 1998	Cum. 1997
UNITED STATES	932	1,237	7	131	174	36	1,073	1,438	22	145	16
NEW ENGLAND	52	81	-	-	6	1	182	395	-	21	-
Maine	4	8	-	-	-	-	5	6	-	-	-
N.H.	1	6	-	-	-	-	18	41	-	-	-
Vt.	1	2	-	-	-	-	22	137	-	-	-
Mass.	24	48	-	-	1	1	132	195	-	2	-
R.I.	3	4	-	-	4	-	-	11	-	-	-
Conn.	19	13	-	-	1	-	5	5	-	19	-
MID. ATLANTIC	99	124	1	6	21	1	138	134	13	79	7
Upstate N.Y.	25	26	1	3	4	1	81	55	13	79	1
N.Y. City	8	20	-	-	1	-	-	28	-	-	6
N.J.	28	26	-	-	3	-	-	9	-	-	-
Pa.	38	52	-	3	13	-	57	42	-	-	-
E.N. CENTRAL	134	169	2	20	24	13	124	164	-	-	3
Ohio	55	62	-	10	8	6	44	54	-	-	-
Ind.	25	17	2	2	4	6	40	11	-	-	-
Ill.	25	55	-	-	7	-	7	18	-	-	-
Mich.	14	15	-	8	4	1	16	25	-	-	-
Wis.	15	20	-	-	1	-	17	56	-	-	3
W.N. CENTRAL	74	86	1	16	7	7	84	78	-	1	-
Minn.	6	2	1	9	3	5	55	45	-	-	-
Iowa	11	21	-	5	3	-	13	9	-	-	-
Mo.	33	46	-	1	-	-	9	11	-	1	-
N. Dak.	-	-	-	1	-	-	-	1	-	-	-
S. Dak.	5	3	-	-	-	2	4	1	-	-	-
Nebr.	4	4	-	-	1	-	3	2	-	-	-
Kans.	15	10	-	-	-	-	-	9	-	-	-
S. ATLANTIC	170	212	-	20	23	-	84	130	1	4	1
Del.	1	4	-	-	-	-	-	-	-	-	-
Md.	16	25	-	2	4	-	17	60	-	1	-
D.C.	-	5	-	-	-	-	-	2	-	-	-
Va.	16	17	-	4	2	-	6	17	-	-	1
W. Va.	4	8	-	-	-	-	1	3	-	-	-
N.C.	23	39	-	6	6	-	38	28	-	1	-
S.C.	24	33	-	3	1	-	7	7	-	1	-
Ga.	37	34	-	-	2	-	-	2	-	-	-
Fla.	49	47	-	5	8	-	15	11	1	1	-
E.S. CENTRAL	66	88	-	-	11	1	17	32	-	-	-
Ky.	8	20	-	-	-	1	2	9	-	-	-
Tenn.	31	27	-	-	3	-	6	10	-	-	-
Ala.	27	27	-	-	4	-	9	7	-	-	-
Miss.	-	14	U	-	4	U	-	6	U	-	-
W.S. CENTRAL	65	107	-	21	20	5	52	28	8	33	-
Ark.	13	21	-	-	-	1	6	2	-	-	-
La.	16	21	U	-	5	U	-	7	U	-	-
Okla.	19	13	-	-	-	-	6	2	-	-	-
Tex.	17	52	-	21	15	4	40	17	8	33	-
MOUNTAIN	63	80	-	11	8	6	242	261	-	5	-
Mont.	2	4	-	-	-	-	1	2	-	-	-
Idaho	3	5	-	-	2	2	115	146	-	-	-
Wyo.	3	-	-	1	-	-	7	3	-	-	-
Colo.	15	23	-	1	2	1	34	84	-	-	-
N. Mex.	12	14	N	N	N	-	48	12	-	1	-
Ariz.	22	16	-	4	-	-	22	9	-	1	-
Utah	5	9	-	1	2	3	12	1	-	2	-
Nev.	1	9	U	4	2	U	3	4	U	1	-
PACIFIC	209	290	3	37	54	2	150	216	-	2	5
Wash.	24	28	-	4	3	2	80	98	-	-	-
Oreg.	42	63	N	N	N	-	8	6	-	-	-
Calif.	139	196	2	22	38	-	58	106	-	1	1
Alaska	1	1	-	2	3	-	-	2	-	-	-
Hawaii	3	2	1	9	10	-	4	4	-	1	4
Guam	-	1	U	-	1	U	-	-	U	-	-
P.R.	1	6	-	2	4	-	2	-	-	-	-
V.I.	-	-	U	-	-	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	-	-	U	-	-	U	-	-

N: Not notifiable U: Unavailable -: no reported cases

TABLE IV. Deaths in 122 U.S. cities,* week ending April 18, 1998 (15th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	544	399	90	26	11	18	47
Boston, Mass.	147	100	31	8	4	4	14
Bridgeport, Conn.	36	20	9	3	2	2	3
Cambridge, Mass.	19	14	3	1	-	1	1
Fall River, Mass.	29	25	3	-	1	-	1
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	31	26	4	-	-	1	5
Lynn, Mass.	14	11	2	1	-	-	2
New Bedford, Mass.	23	18	3	1	1	-	2
New Haven, Conn.	32	26	4	1	1	-	1
Providence, R.I.	81	61	10	3	1	6	5
Somerville, Mass.	3	3	-	-	-	-	-
Springfield, Mass.	47	34	8	3	-	2	4
Waterbury, Conn.	26	15	6	3	1	1	2
Worcester, Mass.	56	46	7	2	-	1	7
MID. ATLANTIC	2,104	1,453	391	161	39	60	109
Albany, N.Y.	41	28	7	5	-	1	3
Allentown, Pa.	21	19	2	-	-	-	-
Buffalo, N.Y.	U	U	U	U	U	U	U
Camden, N.J.	34	20	8	2	3	1	3
Elizabeth, N.J.	35	26	1	7	1	-	-
Erie, Pa.	37	32	4	1	-	-	2
Jersey City, N.J.	50	26	16	6	1	1	-
New York City, N.Y.	1,088	770	211	75	10	22	48
Newark, N.J.	67	30	19	10	3	5	3
Paterson, N.J.	32	18	7	4	1	2	-
Philadelphia, Pa.	274	160	53	38	11	12	15
Pittsburgh, Pa.§	82	63	9	6	2	2	9
Reading, Pa.	34	24	9	-	-	1	1
Rochester, N.Y.	123	91	19	-	5	8	11
Schenectady, N.Y.	31	27	4	-	-	-	2
Scranton, Pa.	26	23	2	-	-	1	2
Syracuse, N.Y.	80	57	13	6	-	4	7
Trenton, N.J.	33	24	6	1	2	-	3
Utica, N.Y.	16	15	1	-	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,047	1,398	395	140	64	48	147
Akron, Ohio	38	23	9	3	2	1	-
Canton, Ohio	22	13	6	2	-	1	3
Chicago, Ill.	379	226	90	36	18	7	34
Cincinnati, Ohio	124	91	21	6	1	5	15
Cleveland, Ohio	154	107	24	13	2	8	7
Columbus, Ohio	181	124	35	11	7	4	16
Dayton, Ohio	108	84	18	4	-	2	10
Detroit, Mich.	185	113	41	18	9	4	9
Evansville, Ind.	43	35	5	2	-	1	2
Fort Wayne, Ind.	69	47	10	6	4	2	3
Gary, Ind.	19	3	9	-	7	-	-
Grand Rapids, Mich.	49	39	8	2	-	-	4
Indianapolis, Ind.	203	144	34	14	6	5	-
Lansing, Mich.	63	47	12	2	1	1	11
Milwaukee, Wis.	128	90	24	10	2	2	11
Peoria, Ill.	36	26	7	2	-	1	2
Rockford, Ill.	61	49	7	2	1	2	4
South Bend, Ind.	46	34	9	1	1	1	2
Toledo, Ohio	93	64	22	4	2	1	13
Youngstown, Ohio	46	39	4	2	1	-	1
W.N. CENTRAL	695	502	112	39	8	22	39
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	24	18	5	-	1	-	2
Kansas City, Kans.	20	13	5	2	-	-	-
Kansas City, Mo.	98	58	15	6	1	6	2
Lincoln, Nebr.	35	25	5	5	-	-	4
Minneapolis, Minn.	158	127	21	4	2	4	9
Omaha, Nebr.	77	53	19	4	-	1	7
St. Louis, Mo.	109	74	17	8	2	8	6
St. Paul, Minn.	93	74	13	3	2	1	7
Wichita, Kans.	81	60	12	7	-	2	2
S. ATLANTIC	1,244	790	260	126	35	30	58
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	168	104	38	20	5	1	13
Charlotte, N.C.	96	60	21	9	4	2	9
Jacksonville, Fla.	129	87	28	9	2	3	3
Miami, Fla.	111	65	20	16	6	2	-
Norfolk, Va.	57	34	12	5	3	3	3
Richmond, Va.	54	31	13	2	-	8	-
Savannah, Ga.	53	33	12	5	2	1	3
St. Petersburg, Fla.	51	43	6	2	-	-	2
Tampa, Fla.	156	108	27	16	4	1	14
Washington, D.C.	360	217	83	41	9	9	11
Wilmington, Del.	9	8	-	1	-	-	-
E.S. CENTRAL	802	533	155	63	28	21	54
Birmingham, Ala.	131	92	21	10	3	3	8
Chattanooga, Tenn.	94	65	22	4	3	-	9
Knoxville, Tenn.	77	50	13	9	3	2	6
Lexington, Ky.	77	47	16	6	5	3	5
Memphis, Tenn.	163	109	27	15	5	7	14
Mobile, Ala.	93	60	17	9	5	2	1
Montgomery, Ala.	78	55	12	5	2	4	10
Nashville, Tenn.	89	55	27	5	2	-	1
W.S. CENTRAL	1,369	891	290	101	85	32	94
Austin, Tex.	80	54	13	7	6	-	2
Baton Rouge, La.	38	21	10	6	1	-	1
Corpus Christi, Tex.	38	24	8	3	2	1	2
Dallas, Tex.	166	90	42	14	10	10	2
El Paso, Tex.	71	46	16	4	3	2	1
Ft. Worth, Tex.	141	95	30	10	1	5	23
Houston, Tex.	297	182	75	24	11	5	28
Little Rock, Ark.	56	39	10	4	2	1	3
New Orleans, La.	90	58	15	9	5	3	-
San Antonio, Tex.	173	127	31	6	7	2	12
Shreveport, La.	70	51	13	2	2	2	7
Tulsa, Okla.	149	104	27	12	5	1	13
MOUNTAIN	738	514	132	54	23	13	53
Albuquerque, N.M.	115	81	19	10	4	1	5
Boise, Idaho	38	32	2	4	-	-	3
Colo. Springs, Colo.	34	20	6	6	1	1	3
Denver, Colo.	98	67	21	4	4	2	10
Las Vegas, Nev.	193	139	39	9	5	1	9
Ogden, Utah	30	22	4	3	-	1	2
Phoenix, Ariz.	58	37	10	5	2	2	4
Pueblo, Colo.	25	15	7	2	1	-	2
Salt Lake City, Utah	U	U	U	U	U	U	U
Tucson, Ariz.	147	101	24	11	6	5	15
PACIFIC	1,864	1,366	311	118	37	32	196
Berkeley, Calif.	17	13	4	-	-	-	-
Fresno, Calif.	121	87	20	8	2	4	-
Glendale, Calif.	24	23	1	-	-	-	3
Honolulu, Hawaii	82	63	12	4	-	3	4
Long Beach, Calif.	77	58	9	4	4	2	7
Los Angeles, Calif.	460	342	76	30	6	6	47
Pasadena, Calif.	19	11	5	2	-	1	2
Portland, Oreg.	92	74	13	4	1	-	8
Sacramento, Calif.	187	140	33	9	4	1	39
San Diego, Calif.	159	105	30	15	5	4	17
San Francisco, Calif.	140	88	26	17	6	3	16
San Jose, Calif.	207	149	39	10	4	5	24
Santa Cruz, Calif.	27	24	2	1	-	-	4
Seattle, Wash.	127	95	16	10	4	2	7
Spokane, Wash.	63	46	15	1	1	-	10
Tacoma, Wash.	62	48	10	3	-	1	8
TOTAL	11,407¶	7,846	2,136	828	300	276	797

U: Unavailable -: no reported cases

*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

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